
know the difference in AM and PM in respect to telling time within the twenty-four-hour period. - this may need to be reviewed in a different lesson.

Provide students with three times on the board (8:00am, 12:00pm, and 5:00pm). Have students choose a time from the board and have them think about something they do at that time every day. After you are done thinking about the time you picked I want you to turn and share with someone.

## Explain: (concepts, procedures, vocabulary, etc.)

vocab: o'clock, hour, minute, digital, analog, half hour, time

Show the students the large demonstration clock (attached) without hour or minute hand. Friends, there are 60 minutes in an hour. The minutes are represented by the small lines that go around the outside (perimeter) of the clock. The darker lines and numbers represent the hours.


Pull this image up on the smart board so it is large enough for everyone to see.
Fill in the missing hours by counting sequentially with students and recording the number on the demonstration clock. Let's count together and fill in the missing numbers on this clock.

Draw on the hour hand. The hour hand tells us what the hour is. As the hour hand moves around the clock, it tells us when we are at the next hour. Complete some examples as the hour hand points to the numbers around the clock. (Note: include practice where the hour hand does not exactly point to the number and discuss what the hour would be if the hour hand is between numbers.)

Next, add the minute hand to the clock using the same fastener. This hand on the clock moves around and tells us how many minutes there are until we reach the next hour. Each time the minute hand goes around the clock once, an hour has gone by. When the minute hand on the clock points to the twelve, we say the number the hour hand points to and o'clock. Each little dash represents 1 minutes.

Open up the interactive clock on computer
http://time.virneth.co.uk/e-clock/interactive-clock.php - with minutes showing
http://www.visnos.com/demos/clock - without minutes showing
Using the interactive clock sample that the students will use (see attachment), demonstrate how 5 o'clock is written in digital form. Provide additional examples with whole group.


Have students practice some examples of time to the hour on the interactive clocks where they display the time on the clock using the hour and minute hands and record the time digitally with a dry erase marker.

## Math

## Date: Practicum II Week 1

Show students the demonstration clock. Remind the students that when the minute hand starts on 12 and goes all the way around to the 12 again, it is 60 minutes. Then fold the paper in half and explain that half of 60 is 30 , so when the minute hand gets to the 6 , it is 30 minutes.

Using the interactive clock, model what the hour hand looks like as the minute hand moves around the clock. Explain that, as the minute hand moves around the clock, the hour hand moves toward the next hour number.

Model some examples of what different half hour times look like with an analog clock and how to write it in digital form.
Show the students how the hour hand is between the numbers when the minute hand tells us it's 30 minutes past the hour. Use the interactive clock on the web

The students will then be given examples from the teacher and practice showing time to the half hour using the hour and minute hand and write it digitally with dry erase marker.

1. call out some examples of time to the hour (3:00, 6:00, 12:00, and 10:00). Use interactive clocks
2. Students will use laminate clocks to show time to the hour. After setting the hands on the clock, students will use dry erase markers to write the digital time in the space provided on the laminate clock.
3. ask students what on the clocks tells them that is time to the hour and not the half hour.
4. call out some examples of time to the half-hour (1:30, 11:30, 6:30, and 4:30).
5. Students will use laminate clocks to show time to the half-hour. After setting the hands on the clock, students will use dry erase markers to write the digital time in the space provided on the laminate clock.
6. ask the students what on the clocks tells them that is time to the hour and not the half hour.
**********Hand out Exit Slips********* (half-hour)
If time allows, you may choose to play this video - you can also use it as a brain break at the end of the lesson. https://www.youtube.com/watch?v=g6tJAy 7AL4
Explore: (independent, concreate practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)
Once students have had ample amounts of practice telling time to the hour and half hour both in analog and digital format, students will work in pairs to complete the paired task card activity.

Students will also complete the paired task activity. Another activity that can be used if time allows.

1. Students will have a predetermined number of cards with pictures of clocks, times written in digital format, and the words used to tell time.
2. The teacher will give each pair a packet where the students will work together to match cards of time to the hour and half hour. Students will match the analog clock with the digital time and the words used to tell time.
3. Students will peer assess one another in pairs.

## Math

## Date: Practicum II Week 1



## Math

## Date: Practicum II Week 1

## Reflection (What went well? What did the students learn? How do you know? What changes would you make?):

Before the lesson, I was able to talk to Mrs. Steiner about the lesson I had planned. She really thought the kids would like it. She suggested that some of the students were ready for time that focused on 'quarter to' and 'quarter after.' Because we spoke before I was able to go back and add these to my lesson. She also mentioned that she still had some students struggling with the o'clock aspect of telling time. I was going to have students of varying skill levels for this lesson. She did ask me if I could switch it to stations because she knows how restless her kids can get. I really didn't think it could and I wanted to challenge myself with whole group instruction. But after looking at, I found that she already did her math in stations and it would be simply to do this lesson with a small group. The change worked out nicely.

## What went well?

I originally planned this as a whole group lesson, but they do math in stations. So, I switched this plan to small group. This worked great!
Students were more engaged when I separated them, so they weren't so close together for the matching game.
Because this lesson was taught in small group, I was able to use a hands-on interactive clock instead of the computer. This worked really nicely when I was explaining how the hour hand was half way between the two hours when the minute hand was at the thirty.

The students were the most engaged when they were doing something with their hands. This worked really nicely because the lesson is designed so they are constantly working.

| What did the students learn? | How do you know? |
| :--- | :--- |
| The two names of the clocks: analog/digital | I told them and asked again at the end of the lesson; I have not been <br> able to ask a second time, so I am unsure if the information stuck. <br> Make it a point to ask the students you had in small group the next <br> day of the names of the two clocks. |
| Two 30 minute (half-hour) in one hour. <br> Four 15-minute (quarter hour) in one hour. | Questioned; students answered correctly. |
| How to write time for a digital clock. | Observation by teacher. I had them create their own time. <br> I had some students make a few mistakes. <br> They would write 30:30 for 3:30. They got confused and didn't <br> realize to leave one box blank if it is only one digit. <br> Make a point of explaining this more clearly next time. |
| Correctly tell time to the hour. <br> Correctly tell time to the half-hour. | Exit slips \& Matching game |
| Long hand=hour hand <br> Short hand=minute hand | Exit slips \& Matching game |

## What changes would you make?

I wish we weren't sitting so close - they tended to look at neighbors when I asked a time they did not know. I would gently remind them to complete the time by themselves.

The times in which I was talking and explaining they wanted to giggle with their friends. I just have to be more assertive - and this will come when I have my own class and won't be the one coming in the middle of the year.

Math groups were already planned, but I would have split it up differently. I would make groups based on skill level. I say this because I had some boys who were ready to move onto 'quarter to' and 'quarter after.'

Change my language - when Mrs. Steiner was working with time the next day she used the phrase "Whose house is it in?" to refer to what hour it was.

Have examples of times - you kind of spent a long time picking out a variety of times to ask the students.
Make sure all of the materials are ready to be handed out. You took too long deciding which student would get what.
My last activity - What time is it... -- You need to find a different time to do this. There isn't enough time in the station to complete this task, especially because I wanted all the students to participate all at once. Because of the crazy days we were having, I was only able to work with one group per day - which isn't ideal. Complete this activity once all of the groups have seen the lesson.

Math
Date: Practicum II Week 1




## 7:45 <br>  <br> $9: 45$

| twelve o'clock | four o'clock | Nine o'clock |
| :---: | :---: | :---: |
| six O'clock | one o'clock | five o'clock |
| eleven thirty | seven thirty | two thirty |
| three thirty | twelve thirty | eight thirty |
| One Fifteen | Three Fifteen | Four Fifteen |
| Nine Fifteen | Eleven Fifteen | Six Fifteen |
| Two Forty-five | Five Forty-five | Six Forty-five |
| Seven Forty-five | Eight Forty-five | Nine Forty-five |

Math
Date: Practicum II Week 1


Date: Practicum II Week 1



Date: Practicum II Week 1


Date: Practicum II Week 1

| Kellen |  | lan |  |
| :--- | :--- | :--- | :--- |
| Teddy |  | Brady |  |
| Jack |  | Kambree |  |
| Ben |  | Dylan |  |
| Ethan |  | Genny |  |
| Keira |  | Sean |  |
| Silas |  | Bentleigh |  |
| Eli |  | Isabella |  |
| Addelyn |  | Eva |  |
| Johansson |  |  |  |
| Shawntad |  |  |  |
| Eden |  |  |  |

Math
Date: Practicum II Week 1





Name: $\qquad$ Date: $\qquad$
1.MD. 3 Tell and write time to the hour and half-hour (including o'clock and half past) using analog and digital clocks.

Fill in the digital clock Fill in the analogue clock


## Fill in the digital and analogue clock



## Half-past four o'clock

Math
Date: Practicum II Week 1

| Criteria | Proficiency level |
| :--- | :---: |
| All questions are answered <br> correctly | 3 |
| 2 out of 3 questions are answered <br> correctly | 2 |
| 1 out of 3 questions are answered <br> correctly | 1 |

